

said, that no work, however excellent its merits in other respects, will be very long remembered, unless its style recommend it to the regards of posterity. The finest models of Rome and Greece, the Bible, the best works of our Anglo-Saxon forefathers, and of Italy, possess certain characteristics common to them all, and which have enabled them to live, and which will cause them to endure so long as the languages in which they are written shall remain known. We would suggest to the author that several subjects not treated of might with advantage be introduced into the work; as, for instance, a chapter on the mortality of infants under five years of age.

E. H.

ART. XVI.—*Syphilitic Diseases; their Pathology, Diagnosis, and Treatment; including Experimental Researches on Inoculation as a Differential Agent in testing the Character of these Affections*. By JOHN C. EGAN, M. D., M. R. I. A., &c. &c. London: John Churchill, 1853. 8vo. pp. 346.

THIS is the most recent systematic treatise on syphilitic diseases with which we are acquainted. It should rather be entitled a Treatise on Venereal Diseases, inasmuch as it embraces both gonorrhœa and syphilis. It is another offspring from the Dublin School, which had previously produced the essays of Colles, Carmichael, and Wallæe, besides other minor contributions upon the same subject.

Dr. Egan has been for several years connected with the "Westmoreland Lock Hospital," in Dublin, where abundant material has been furnished him for the study of venereal diseases, and which has chiefly supplied him with the data for his treatise. We may also add that the results of his investigations were submitted to the Surgical Society of Ireland, and found great favour with that learned body.

After some very general remarks on the *history* of these affections, in which he merely coincides with most modern authors in the opinion that these diseases "existed in the remote ages of the world, although in many instances loosely and imperfectly described," Dr. Egan devotes quite a full chapter to "Researches on Inoculation."

Dr. Egan's experiments in inoculating corroborate, in the main, those of M. Ricord. There are some particulars, however, in which their observations do not agree. Dr. Egan was never able to produce the characteristic pustule of primary syphilis by inserting the mucopurulent matter of gonorrhœa beneath the skin; "but many cases presented, where the discharge was accompanied by abrasions, or superficial ulcerations of the vaginal mucous membrane, and which were followed by a mild form of secondaries (generally a papular eruption over the body), although incapable of inoculation." And again, by inoculations practised with the matter taken from buboes resulting from gonorrhœa, he says: "I was unable, after repeated trials, to elicit any effect beyond slight irritation of the cuticular surface, results so far coincident with the experiments of M. Ricord; but I have been convinced, from repeated observation, that even here a mild form of constitutional symptoms, as a papular eruption, an erythematous redness of the fauces, has often resulted on this affection."

Before the existence of chancre concealed within the urethra was so happily determined by M. Ricord, the occurrence of secondary symptoms of syphilis, after what was supposed to be simple gonorrhœa, was very commonly admitted.

And, indeed, even now, there are many who think, with Dr. Egan, that cutaneous eruptions, iritis, and rheumatism do sometimes succeed to pure and simple gonorrhœa, just as they follow upon chancre, as legitimate effects. But when we consider that gonorrhœal matter is not inoculable, as is on all sides admitted; that the occurrence of these subsequent phenomena is confessedly rare, and has by many most careful observers never been witnessed; that errors in diagnosis are easily made; that mere coincidences may be, without great care and repeated observations, raised to the importance of consequences—we should certainly be unwilling to entertain the idea that gonorrhœa has its constitutional sequelæ, and thereby revert to the chaotic state in which the profession groped before modern investigations illumined the diagnosis of the two primary venereal affections. Dr. Egan furnishes his readers with no accurately recorded cases upon which his belief is based. As to the occurrence of “papular eruptions” after gonorrhœa, we know perfectly well, as M. Ricord remarks, that they are often produced by the resinous drugs which are commonly administered to gonorrhœal patients, and which, we are allowed to surmise, may have been exhibited to the persons who fell under Dr. Egan’s notice, especially as he, in a subsequent chapter, most highly recommends their employment.

The author performed some experiments to test the inoculability of the matter of *phagedænic* syphilitic ulcers, which confirmed the statements of M. Ricord with reference to the infrequency of any positive result. “But,” he remarks, “although specific results do not always succeed to inoculation of this destructive form of ulceration, yet sufficient evidence can be adduced to prove that such consequences do occasionally ensue; and that ulcers, identical in character and disposition, have made their appearance on sound parts of the body, from the introduction of pus from these peculiar sores.” And, to confirm his opinion, he cites cases and statements by Mr. Hamilton, of Dublin, M. Ricord, and Mr. Acton, deducing from the whole the inferences that the virus of this particular variety of the syphilitic ulcer is peculiar, and that it affords one reason for believing in the existence of a plurality of syphilitic poisons; that the matter of a simple chancre produces a sore similar to that from which it was obtained, and gives rise to a tolerably uniform succession of secondary symptoms; while the matter from a phagedænic ulcer originates another like the latter, with a more or less characteristic group of constitutional phenomena. This point is discussed more at length in the succeeding chapter. In this, if we are not greatly mistaken, Dr. Egan has not correctly represented the writers whom he quotes. We are under the impression that these gentlemen contend that there is but one syphilitic virus, and that, when the secretions or the detritus from a phagedænic chancre, existing upon an individual, are inoculated in the *same* person, a similar kind of ulcer is generated, not because the *virus* is peculiar, but simply because his *condition* is peculiar. Mr. Acton expressly cites a case in which three students were infected from the same *grisette* during one evening. One had a simple excoriation, another an indurated chancre, and the third a phagedænic sore. There is no lack of similar instances.

Dr. Egan is, very properly, we think, an unbeliever in the doctrine promulgated recently by M. Auzias Turenne, that successive inoculations modify or prevent renewed infection.

The secondary and tertiary phenomena of syphilis, Dr. Egan has never found to be inoculable; yet he believes that an infant suffering from *constitutional syphilis* may communicate the disease to its nurse, and *vice versa*. But as this important subject is examined separately in a subsequent chapter, we shall make no comments upon it now.

The next subject treated of is Gonorrhœa, to the consideration of which about a hundred pages are devoted. The topic is discussed with much fairness and good sense. We observe nothing new in the author's observations; nor do we think that his description of the complaint, in all its details, is quite as full as many would desire. But the prominent phenomena are carefully exhibited, and the treatment recommended is exceedingly judicious.

The remainder of the book, nearly two hundred pages, treats of *Syphilis*, in its different phases.

Dr. Egan adopts, to a considerable extent, the views of Mr. Carmichael, with regard to the peculiarity of each variety of syphilitic primary sores, and the secondary consequences proper to each. He says:—

"In a former chapter I endeavoured to show that, when uninterfered with by local applications, venereal ulcers assume certain specific characters; that from these appearances may, to a great extent, be prognosticated what class of constitutional affections are most likely to supervene; or, rather, what will be the leading characteristics of the secondary or tertiary symptoms, should they succeed to the primary sore. I likewise stated that experience had led me to believe that syphilitic ulcers are amenable to certain fixed, though not immutable, laws; that the subsequent cutaneous eruption, together with certain abnormal alterations in the natural appearance of the throat and other tissues, result upon peculiar forms of primary sores; and that these general indications (although, as in the case of eruptions, they may partake more or less of a mixed character) are sufficiently preserved in their distinctive traits to enable us to recognize upon what species of original infection they are consequent. My faith in this doctrine has been strengthened by the results of inoculation; and I have previously demonstrated that matter taken from primary sores of a recognized class will produce ulcers of a similar description." Pp. 151, 152.

The assertion made in the last clause of the above quotation is scarcely warranted. So far as we have been able to detect, by repeated careful perusal of the chapter on inoculation, Dr. Egan has not attempted to prove that any one of the varieties of chancre begets its like, excepting the *phagedænic*; and, as we have before remarked, it is much more probable that the identity in this case is due to the fact that the inoculation was practised upon the same person from whom the matter was taken, rather than to the cause assumed by Dr. Egan. It is true, that he does not inform us that his experiments with the *syphilitic* virus were thus conducted; but, inasmuch as this is the common plan, and it is not otherwise stated in his book, and as we are told that his inoculations with *gonorrhœal* matter were performed upon the patient from whom it was obtained, we think it fair to infer that such was the case with the chancreous virus. In addition to the case which we previously cited from Mr. Acton, to show that one and the same chancre may produce in different persons different varieties of primary sore, we quote the following from the same author:—

"M. Vidal de Cassis took the secretion from the sore of a patient (which sore was unindurated) and inoculated a healthy pupil; the inoculated point in the pupil took on an indurated character, and the young man suffered most severely." P. 375.

If, then, the character of a primary sore is not determined by that of the ulcer from which the infection was contracted, it does not seem logical to infer that the symptoms of constitutional disease will be decided by it. It seems to us more probable that both the primary and the secondary phenomena are dependent upon the local and constitutional peculiarities of each individual.

The classification which Dr. Egan adopts is the following: 1. *The superficial primary ulcer*, its most common sequelæ being a papular eruption, in-

creased vascularity of the throat, pains in the joints, simulating rheumatism, and iritis. 2. The primary ulcer, distinguished by *elevated margins, centre slightly excavated, and even without granulations*, followed by increased vascularity with a dry and granular appearance of the throat, a pustular eruption, painful distension of the joints, and nodes. 3. *The phagedænic primary ulcer*, inducing sloughing ulceration at the back of the pharynx, rupial eruption, severe pains in the joints, and nodes. 4. *The indurated primary chancre*, succeeded by excavated ulcer of the tonsils; enlargement of the cervical glands, the scaly eruption, pains in the head and shafts of the bones, and nodes.

Dr. Egan does not contend that the above will be found to be the invariable grouping of the symptoms of syphilis, but that it will be so in general. Each class is well described, and for each a very judicious mode of treatment is recommended.

Besides these, he enumerates the tubercular eruption, and caries and exfoliations of the nasal bones, under the head of "unclassified constitutional affections;" while muddiness of the skin, alopecia, affections of the nails, affections of the tongue, ulcerations, syphilitic testicle, and bubo are considered as "affections common to all classes."

An interesting chapter is devoted to the description of syphilis as manifested in pregnant women and infants. We quote the result of Dr. Egan's observations:—

"1. The fœtus in utero may be contaminated by decided syphilitic symptoms in the father, while the mother may present no traces of the disease. 2. The child may be affected by a *latent venereal taint* in the father, while the mother may exhibit no evidence of the malady. 3. The child (with the exception of purulent or gonorrhœal ophthalmia) is rarely affected during its entrance into the world. 4. Abortion may be prevented, and a healthy child insured, by a judicious mercurial treatment during pregnancy. 5. A syphilitic taint in the unimpregnated female may be removed by the employment of mercury."

"Syphilis as contracted from nursed children" is the topic considered in the seventeenth chapter. Dr. Egan is, as we have already intimated, a believer in, and a warm advocate of, the doctrine that an infant affected with secondary syphilis only may, and frequently does, infect its previously healthy nurse. To prove this, he cites opinions from several distinguished men, and quotes cases. But we must say that, to us, his argument is exceedingly weak and inconclusive.

In the first place, this mode of infection is most improbable. Direct experiments with regard to the inoculability of all forms of constitutional syphilitic disease have, in the hands of Dr. Egan and all other observers, been unsuccessful. And the investigations of John Hunter and Ricord have equally demonstrated that the blood and the secretions of persons affected with constitutional syphilis are not inoculable. Dr. Egan himself adopts and urges the truth of this discovery, indorsing the assertion of Mr. Travers, "that the natural secretions, by a most happy economy, however they may deviate from a healthy standard, are not in any case a vehicle of this poison." p. 308. Moreover, cases are recorded by Mr. Hunter and M. Ricord (*Traité de la Maladie Vénérienne, par J. Hunter, avec des Notes et des Additions par Ricord*, Paris, 1852, pp. 563–4), in which the secretions of chancres have been actually *swallowed*, and yet no infection has resulted. If, then, neither the secretions from constitutional syphilitic ulcers, nor the blood, nor the natural secretions of persons suffering under lues venerea can occasion any specific effect, so far as experiment has determined, is it probable that a specific ulcer or constitutional symptoms are produced by the contact, in suck-

ing or otherwise, of a poxy infant? And a very curious fact, inexplicable excepting upon the admission of an error of observation, is that, according to the statements of all, Dr. Egan amongst the rest, *an infant never communicates the disease to its own mother*, but only to its hired nurse. Is it probable that, if a mother should be inoculated with syphilitic virus taken from a *chancre* existing upon her own child, proper conditions being attended to, infection would ensue less certainly than if a hired nurse were tested with the same matter?

Again. The cases quoted by Dr. Egan are by no means satisfactory. The first, indeed, is, it appears to us, an unfortunate one for him.

"The child, as stated by the medical attendant, had sores on its mouth, around the anus, and on the serotum. The nurse contracted the disease; was covered with a desquamation of branny scales all over the body; infected her husband, the disease in whom appeared in tuberculated ulcers on the dorsum of the penis, &c." P. 294.

Now, is it to be believed that an infant, a nursling, not having primary syphilis, and the symptoms of whose constitutional infection were not inoculable, could generate within the vagina of its nurse a sore by means of which the husband's penis should become affected with "tuberculated ulcers?" Or, even if the ulcers on the infant's mouth were *primary* (as may have been the case, because the *mother* had "an intractable sore on her breast," which very probably was a chancre and infected the infant's mouth, from which, in turn, the nurse *may* have become contaminated), how came the virus in the *nurse's vagina*? King George marvelled how the apple got into the dumpling; but we may be more astonished at this phenomenon. In any event, the case is not a fair one, because the infant may have had, and seems to have been supposed to have, primary sores upon its mouth contracted from the ulcer upon its mother's breast, which primary sores may have infected the nurse, the virus having come in contact with the abraded surface of the nipple, or having been accidentally inserted within her external genital organs, thus explaining the occurrence of the "tuberculated ulcers" on the penis of the nurse's husband; or some such virus must have found its way into the vagina of the woman. Either supposition, as we have said, removes the case from the category now under consideration.

The second case is thus advanced:—

"The subject of it, a Mrs. A——, in consequence of her own child being unable to suck the breasts, a strange infant was applied, and continued twice a day for four or five days. At this period the left nipple was fissured, and a number of spots subsequently appeared around it. Six weeks after, she was affected with a syphilitic eruption, and excavated ulcers in the tonsils supervened. The nurse and child finally recovered. The wife, adds Dr. Gavin, being virtuous, could be inoculated in no other way than through the suckling of the diseased babe."

Perhaps here lies the difficulty; it is *assumed* as indubitable that the woman is "*virtuous*," and the husband pure, and, therefore, the infant is the cause of the disease. Evidence such as this must be "ruled out of court." And more than this, so far as the report of Dr. Egan is to serve as the basis of an argument, it is not said that anything whatever was the matter with the child.

Dr. Egan's own cases are four in number. In not one of them was an examination of the genital organs of the nurse made; and as, in the instances already cited, the only reason for doubting the existence of primary syphilis in the woman was that, in one, the person was "a married woman, and mother of three children; her husband a man of irreproachable character;" another was "of strictly temperate habits, married, and mother of four chil-

dren;" a third was "aged sixty, of temperate habits, a widow, and mother of nine children; her husband dead seven years;" the fourth was "married, and mother of five healthy children; of strictly temperate habits; her husband a man of excellent character." In a matter of so much interest to science, and of such vast importance in a social and moral point of view, we do not conceive that a physician should be satisfied with such loose evidence of character; he should, before hazarding an opinion, insist upon *a careful scrutiny of the woman's person*, in order to see if she may not have a primary syphilitic ulcer, or the vestiges of it. Nothing less than this can be satisfactory.

But, to continue our examination of Dr. Egan's cases. In the first, the nurse assured the doctor that she took an infant to nurse, seven weeks old, and, "to all appearance, in the enjoyment of perfect health. In a week afterwards, an eruption made its appearance, first on the nates, and subsequently on the inside of the thighs, which continued alternately declining and reappearing, and was the only symptom of disease present, until within the last two months, when she observed a soreness of the mouth, and a disposition in the mucous membrane to become detached from the lips." The doctor himself says:—

"On examination, an ill-defined scaly eruption is visible on the inner part of the thigh and arms of the child; a few spots are interspersed over its body; there are no condylomatous excrescences, or any other affection, in the vicinity of the anus or vagina, and the mouth is now perfectly healed."

Now, we submit that there is no proof whatever, either in the statement of the nurse or in the report of Dr. Egan, that this child had syphilis at all; and it must be borne in mind that we have no reason to suppose that either of the parents had syphilis, and that when the nurse took the child the latter was, to all appearance, perfectly healthy. But, in the course of the narration, it is stated that the nurse presented, with other phenomena, tuberculated condylomata at the orifice of the vagina. It is certainly to be regretted that, while Dr. Egan was examining the genital organs, he did not make a thorough scrutiny.

"Moreover, an ulcer, about the size of an ordinary plum-stone, of an irregular and excavated form, with uneven and slightly everted edges, situated immediately to the right of the nipple, is seated on the left breast of the nurse; which, she states, first presented itself a few days after the mouth of the child became affected, and commenced in the form of a fissure, which has been gradually increasing in size to the present time."

This may have been the source of the assumed infection of the child. The fact that Dr. Egan was unable to inoculate from it does not positively determine its non-specific character, for he admits that he has not always succeeded in inoculating from undoubted chancres; nor do we think that in a case of this kind, where probabilities are so opposed to the story, the nurse's account of the order of sequence of the phenomena is of much weight. As the case now stands, therefore, there is reason to *suspect* that the nurse herself may have infected the child, if the latter is to be supposed to have been affected with syphilis.

In the second case, a married woman was employed as wet-nurse to an infant six weeks old, and apparently in perfect health. About a month afterwards, a "rash" appeared on the child's body, which a physician "*suspected*" to be syphilitic. The rash gradually disappeared under "the usual remedies;" but after some time the nurse observed "blisters on the tongue and palate of the child, with a constant flow of saliva from the mouth; the lips shortly afterwards assumed a fissured appearance." These symptoms do not by any means indicate a syphilitic taint. The existence of a "rash" upon nursing children is as common as the infants themselves; and the appearances described

in the mouth and lips are much more likely to have been produced by "the usual remedies" than by constitutional syphilis. But, Dr. Egan goes on to say: "An ulcer is perceptible on each breast of the nurse; that on the right is about the size of a split pea, and is situated immediately above the nipple; the left is somewhat smaller, and engages the nipple itself, at its upper part; both are slightly excavated; they were formerly attended with a discharge, but are now perfectly free from the slightest degree of moisture." In this instance, also, an attempt to inoculate failed.

The third case is worth nothing. A widow, sixty years old, undertook as dry-nurse the care of an infant, "which at the time was labouring under disease, manifested by sores about the nates and mouth. The latter she describes as being of a brownish colour, and attended with a constant flow of saliva." In some unknown way, a scratch appeared upon the neck of the nurse, which was supposed to have been infected from the child's mouth, and which, when seen by Dr. Egan, presented the appearance of "a lacerated wound, of about an inch and a half in length, running parallel with the inferior edge of the clavicle on the right side, surrounded by an erysipelatous blush, which is gradually lost in the adjacent structure. The neck and arms are covered with an eruption, the character of which it is impossible to determine, being now in the stage of desquamation." The nurse had been profusely salivated. There is surely nothing in the report of this case to warrant any one in surmising that either the infant or the nurse had syphilis in any form.

The last instance adduced by Dr. Egan is substantially as follows: An infant, a year and a half old, born of syphilitic parents, was committed to the care of its grandmother, as dry-nurse; shortly after its birth "an eruption" appeared upon its body, which alternately declined and reappeared; at the period of the grandmother's taking charge of the child, "there were sores at the verge of the anus of the infant, the mucous membrane of the lips was inclined to peel off, and the tongue was the seat of small white blisters." The grandmother "states that she was constantly in the habit of kissing the child during the time its mouth was affected, and more than once applied her lips to the sores on the anus." About three months, more or less, after the commencement of her service, the nurse perceived for the first time blisters on her tongue, with a fissured state of the lips, which disappeared in the course of six weeks without having recourse to any mode of treatment. During this period she describes herself as "very dead in spirits," with an unaccountable oppression over her. In a month after the tongue and lips had healed, she was attacked with an inveterate itching of the vulva, which was succeeded by elevated "condylomatous sores." She afterwards had an attack of "inflammation of the right eye," and subsequently iritis, probably, of the left eye. No examination of the genital organs is spoken of, nor was inoculation from the ulcers of the vulva practised—an unfortunate omission, truly, and one which is well calculated to throw doubt and suspicion upon the woman, as being indebted to herself for her own constitutional infection, if it be admitted that she had syphilis.

On the whole, then, what conclusion can be drawn from these six cases, as reported in the book before us, the negative results of direct inoculation of the matter of secondary syphilis being borne in mind? In the first, it is probable that the infant had a primary syphilitic ulcer upon its mouth, and the nurse a primary sore in her vagina, so that the latter had a twofold source for her constitutional contamination. In the second, Dr. Egan gives us no right to fancy that the child was at all diseased, and no other reason to suppose that the nurse had not, or had not had, a chancre, saving the assertion that she was "virtuous." In the third, we must doubt that the infant was diseased, and we must strongly

believe that the nurse herself had had primary syphilis, either in the vagina, or upon the breast, or in both these situations. In the fourth, there is again no evidence whatever that the nursling was diseased; but it is not impossible that the very unusual ulcers upon the woman's breast were chancres. In the fifth, not the slightest ground exists for supposing that either nurse or nursling were in any way affected with syphilis. In the sixth, we cannot say that the child had the disease, but we do affirm that the inveterate itching of the vulva, and the elevated ulcers found there, render it more than probable that the nurse herself had primary syphilis.

We have dwelt thus minutely upon this question, because it is so important in its social and medico-legal aspects, and because we have thought that the arguments usually brought forward to sustain the fact of infection under such circumstances will not bear scrutiny, as we trust we have shown with regard to those advanced by Dr. Egan. It would have been quite possible, seemingly, for him to have established the point at issue, affirmatively or negatively, by subjecting the genital organs of these women to a rigid inspection, as well as testing the specific or non-specific character of the ulcers elsewhere presented. And simply because the sores were situated upon unusual parts of the body, it by no means follows that they were not chancres. Those who have read the works of M. Ricord, must be familiar with the fact that chancre has no fixed position; it has been found between and upon the breasts of women, in and about the mouth, beneath the chin, in the axilla, at the anus—in short, wherever the arrangement and situation of parts afforded the possibility of bestial gratification to men already satiated with enjoyment obtained in the natural use of the sexual organs. Without great watchfulness, and careful examination, a *mistake* is easily made by the surgeon; and, moreover, the propensity to *lie*, common to almost all venereal patients, must be excessively strong in a woman who thinks to cover up her own guilt, or to excuse or account for her own disease, by charging the cause upon the infant committed to her care.

An apposite instance is recorded by M. Ricord, in his *Lettres sur la Syphilis*, p. 103. A nurse had charge of a child of perfectly healthy parents; an eruption appeared upon the infant, and the nurse, fancying or pretending that she had become infected therefrom, insisted upon indemnification. The parents resisted, and the case was submitted to M. Ricord. He found that the child had a common *porrigo larvalis*, and that the nurse bore upon each breast an *indurated chancre*, placed opposite each other; he finally obtained from the woman the acknowledgment that a man, not her husband, “dans la crainte de lui faire un enfant et d’altérer son lait, s’était livré sur elle à des actes que la plume se refuse à tracer.”

We need not quote the deductions which Dr. Egan draws from the facts collected in this chapter; but there is one so improbable that we cannot refrain from submitting it to our readers. He says, p. 323:—

“Infection may be communicated to a *hired dry-nurse* by mere contact, without any breach of surface. This can only occur where she is engaged in caring for, but not suckling the child.”

The concluding chapter contains some general observations on the treatment of syphilitic diseases. The comparative merits of the mercurial and non-mercurial plans are fairly set forth, and a sound discriminating judgment is displayed in the author's views respecting them.

In conclusion, if we were to express our opinion concerning the absolute merits of Dr. Egan's treatise, we should say that it furnishes a useful digest of the phenomena and treatment of venereal diseases, on most practical points; but that, in the discussion of questions requiring a careful observation and a rigid interpretation of facts, it is often at fault.

F. W. S.